REMARKS

Favorable reconsideration of this application, in light of the following discussion and in view of the present amendment, is respectfully requested.

Claims 1, 11, 27 and 30-31 have been amended. Claims 1, 11, 27 and 30-31 remain pending.

IDS

Applicants respectfully request the Examiner to acknowledge the IDS filed concurrently herewith, as well as the IDS previously filed on February 8, 2008 and the IDS filed on May 2, 2008.

REJECTION OF CLAIMS 1, 11, 27 and 30-31 UNDER 35 U.S.C. § 103

On pages 2-3 of the Office Action, the Examiner rejected claims 1, 11, 27 and 30-31 under 35 U.S.C. § 103 as unpatentable over Holmquest (U.S. Patent No. 5,619,105) in view of Dames et al. (U.S. Patent No. 6,414,475).

Neither Holmquest nor Dames et al., alone or in combination, discuss or suggest:

> allowing magnetic flux change occurring to a circuit wiring to act on a detecting conductor arranged in the vicinity of the circuit wiring, the magnetic flux change occurring because of a change in a circuit current due to discharge, both the detecting conductor and the circuit wiring being printed on a circuit board, the detecting conductor having a straight-line segment disposed parallel to a straight-line segment of the circuit wiring such that the magnetic flux change that occurs to the circuit wiring is allowed to act on the straight-line segment of the detecting conductor,

as recited in amended claim 1. In other words, the invention of claim 1 provides that both the detecting conductor and the circuit wiring are print-formed on a circuit board. The Examiner concedes that Holmquest does not teach this feature of claim1 and attempts to make up for this deficiency with Dames et al. However, it respectfully submitted that Dames et al. fails to make up for this deficiency. The Examiner indicates that Dames et al. discloses a current sensor (Fig. 4, element 1) wherein the detecting conductor (current sense coil 4) is on the same PCB as the circuit wiring (lines 2 and 32). However, as is clear from Fig. 1 and column 3, lines 23-24 of Dames et al., reference numerals 2 and 32 are not lines, but instead a first load conductor 2 and a second load conductor 32 fixed at a meter base 30. These load conductors 2 and 32 hold PCB 5 over the meter base 30, as is clear from Fig. 1. Furthermore, Dames et al. does not disclose that these load conductors 2 and 32 are print-formed on the PCB 5. Therefore, the

structure claim 1 wherein both the detecting conductor and the circuit wiring are printed on a circuit board is clearly not taught by Dames et al.

Furthermore, the invention of claim 1 provides that the detecting conductor has a straight-line segment parallel to a straight-line segment of the circuit wiring such that the magnetic flux change that occurs to the circuit wiring is detected by the straight-line segment of the detecting conductor. Holmquest, on the other hand, discloses that "one or more lamp leads are passed through or wound around the toroid T5 to detect the current through the lamp leads" (column 3, lines 44-46). Holmquest also discloses that "as an alternative to the toroid T5, arc detection could be accomplished by using an additional winding closely coupled to the ballast output winding (T4) to magnetically detect the output current from the ballast" (column 3, lines 52-55). As such, Holmquest merely discloses detecting the current by lamp leads passed through or wound around the toroid T5 or detecting the output current from the ballast by an additional winding coupled to the ballast output winding (T4). Contrary to claim 1, Holmquest does not teach that the detecting conductor has a straight-line segment disposed parallel to a straight-line segment of the circuit wiring such that the magnetic flux change that occurs to the circuit wiring is allowed to act on the straight-line segment of the detecting conductor. Dames et al. fails to make up for this deficiency in Holmquest.

Finally, Dames et al. is directed to a current sensor of an integrating wattmeter and does not include an inverter, such that Holmquest and Dames et al. are not in the same filed of art. Therefore, there is no proper motivation to combine the teachings of Holmquest and Dames et al.

Since neither Holmquest nor Dames et al., alone or in combination, discuss or suggest all of the features of claim 1, and there is no proper motivation to combine the references, claim 1 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

Neither Holmquest nor Dames et al., alone or in combination discuss or suggest:

> allowing magnetic flux change occurring to a circuit wiring to act on a detecting conductor arranged in the vicinity of the circuit wiring, the magnetic flux change occurring because of a change in a circuit current due to discharge, both the detecting conductor and the circuit wiring being printed on a circuit board, the detecting conductor having a straight-line segment disposed parallel to a straight-line segment of the circuit wiring such that the magnetic flux change that occurs to the circuit wiring is allowed to act on the straight-line segment of the detecting conductor,

as recited in amended claim 11, and there is no proper motivation to combine the references.

Therefore, claim 11 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

Neither Holmquest nor Dames et al., alone or in combination discuss or suggest:

> allowing magnetic flux change occurring to a circuit wiring to act on a detecting conductor arranged in the vicinity of the circuit wiring, the magnetic flux change occurring because of a change in a circuit current due to discharge, both the detecting conductor and the circuit wiring being printed on a circuit board, the detecting conductor having a straight-line segment disposed parallel to a straight-line segment of the circuit wiring such that the magnetic flux change that occurs to the circuit wiring is allowed to act on the straight-line segment of the detecting conductor,

as recited in amended claim 27, and there is no proper motivation to combine the references. Therefore, claim 27 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

Neither Holmquest nor Dames et al., alone or in combination discuss or suggest:

> allowing a magnetic flux change produced by a circuit to act on a detecting conductor located in a vicinity of the circuit, with the magnetic flux change occurring due to a change in a circuit current due to a discharge, both the detecting conductor and the circuit wiring being printed on a circuit board, the detecting conductor having a straight-line segment disposed parallel to a straight-line segment of the circuit wiring such that the magnetic flux change that occurs to the circuit wiring is allowed to act on the straight-line segment of the detecting conductor,

as recited in amended claim 30, and there is no proper motivation to combine the references. Therefore, claim 30 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

Neither Holmquest nor Dames et al., alone or in combination discuss or suggest:

> allowing a magnetic flux change produced by a circuit current flowing through a circuit wiring to act on a detecting conductor located in a vicinity of the circuit wiring, both the detecting conductor and the circuit wiring being printed on a circuit board, the detecting conductor having a straight-line segment disposed parallel to a straight-line segment of the circuit wiring such that the magnetic flux change that occurs to the circuit wiring is allowed to act on the straight-line segment of the detecting conductor,

as recited in amended claim 31, and there is no proper motivation to combine the references. Therefore, claim 31 patentably distinguishes over the references relied upon. Accordingly, withdrawal of the § 103(a) rejection is respectfully requested.

SUMMARY

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 7-15-08

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